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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,981	01/16/2002	Ryuzo Ueno	OHS-315	9139

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EXAMINER

HAILEY, PATRICIA L

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,981

Applicant(s)

UENO ET AL.

Examiner

Patricia L. Hailey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8 and 13-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,13,14 and 21-34 is/are rejected.
- 7) ☒ Claim(s) 15-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Applicants' Preliminary Amendment, filed on January 16, 2002, has been made of record and entered. With the entry of this amendment, claims 3 and 9-12 have been canceled and new claims 13-34 have been added.

Claims 1, 2, 4-8, and 13-34 are now pending in this application.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on May 22, 2000. It is noted, however, that applicant has not filed a certified copy of Japanese Application No. 2000-150343 as required by 35 U.S.C. 119(b).

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 2, 4, and 5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, and 13 of copending Application No. 09/958,666.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims recite a crystalline mixture solid composition comprising α -D-glucopyranosyl-1,1-mannitol, α -D-glucopyranosyl-1,6-sorbitol, and 0.01 to 1.99 wt. % α -D-glucopyranosyl-1,1-sorbitol (claim 1), whereas the claims in the copending '666 application recite a crystalline mixture solid

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composition comprising the same components, with the exception that the α -D-glucopyranosyl-1,1-sorbitol is present in an amount of from 2 to 25 wt. % (claim 1 of the '666 application). The value of 2 wt. % of the '666 application is considered to read upon the instantly claimed 1.99 wt. %.

Further, the percentage ranges for α -D-glucopyranosyl-1,1-mannitol and α -D-glucopyranosyl-1,6-sorbitol recited in claim 2 of the instant application are overlapped by the percentage ranges of these components respectively recited in claims 1 and 2 of the '666 application, e.g., 50-98 wt. % of α -D-glucopyranosyl-1,1-mannitol, versus 20-75 wt. %, or 29.5 to 75 wt. % of α -D-glucopyranosyl-1,1-mannitol (claims 1 and 2 of the '666 application).

With respect to claims 4 and 5 of the instant application, the crystalline mixture solid composition recited therein comprises α -D-glucopyranosyl-1,1-mannitol and α -D-glucopyranosyl-1,6-sorbitol and has a specific surface area of 0.1 to 5 m²/g, whereas claim 13 of the '666 application recites a crystalline mixture solid composition having specifically defined percentage amounts of α -D-glucopyranosyl-1,1-mannitol and α -D-glucopyranosyl-1,6-sorbitol and having a specific surface area of 0.07 to 0.1 m²/g.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply

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when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C.

102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Willibald-Ettle et al. (U. S. Patent No. 6,458,400).

Willibald-Ettle et al. teach a sweetener comprising 10 to 50% by weight 1,6-GPS, 2-20% by weight of 1,1-GPS, and 30 to 70% by weight of 1,1-GPM, based on the total dry matter content of the sweetener mixture. See col. 2, lines 51-63 of Willibald-Ettle et al.

The minimal amount of 1,1-GPS, 2% by weight, is considered to inherently anticipate the amount of 1.99 wt. % 1,1-GPS recited in the instant claims. Additionally, the specific surface area recited in the claim 5 is considered to be inherently taught by Willibald-Ettle et al.

In view of these teachings, Willibald-Ettle et al. anticipate claims 1, 2, 4, and 5.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 2, 4, 5, 13, 14, and ^{2/}~~32~~-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degelmann et al. (U. S. Patent No. 6,103,894).

Degelmann et al. teach a process for the hydrogenation of sugars selected from the group consisting of isomaltulose, leucrose, trehalulose, maltulose, and lactulose to sugar alcohols (col. 1, line 52 to col. 2, line 37). The hydrogenation of isomaltulose can result in a composition comprising 1,1-GPM and a mixture of 1,6-GPS and 1,1-GPS in percentage ranges comparable to that instantly claimed. See Examples 3 and 9, and Tables 5 and 13 of Degelmann et al.

Although the reference does not specifically disclose separate amounts of 1,6-GPS and 1,1-GPS in the mixture, one of ordinary skill in the art would expect that the amounts of these two components would read upon the instantly claimed percentage ranges, absent the showing of convincing evidence to the contrary. That is, if 1,1-GPS is present in the mixture of 1,6-GPS and 1,1-GPS in an amount within the respectively claimed range, the remaining amount of the mixture comprises 1,6-GPS in an amount within the claimed range of 1 to 50 wt. % 1,6-GPS (e.g., claim 2).

Because Degelmann et al. is considered to read upon the claims in their present form, any attending properties of the claimed composition (e.g., specific surface area) are considered to be encompassed by composition of Degelmann et al. It is well settled that when a claimed composition appears to be substantially the same as a composition disclosed in the prior art, the burden is properly upon the applicant to prove by way of tangible evidence that the prior art composition does not

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necessarily possess characteristics attributed to the CLAIMED composition. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Circ. 1990); In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Swinehart, 439 F.2d 2109, 169 USPQ 226 (CCPA 1971).

With respect to product-by-process claims 21-34, "[A]ny difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art the burden of proof is shifted to the applicant to establish that their product is patentably distinct, not the examiner to show that the same is a process of making." In re Brown, 173 U.S.P.Q. 685 and In re Fessmann, 180 U.S.P.Q. 324.

Product-by-process claims do not patentably distinguish the product of reference even though made by a different process. In re Thorpe, 227 U.S.P.Q. 964.

Allowable Subject Matter

10. Claims 15-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 6-8 are allowed.

12. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not teach or suggest the limitations of claims 6-8, namely the steps of cooling a composition comprising 1,1-GPM, 1,6-GPS, and 1,1-GPS, mixing this composition with a hydrophilic solvent, and separating solid matter from the mixture.

Conclusion


13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (703) 308-3317. The examiner can normally be reached on Mondays-Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (703) 308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.


Lynn Hailey/plh
Examiner, Art Unit 1755
March 19, 2003


Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700